United States
Department of
Agriculture

Soil
Conservation
Service

Bozeman,
Montana

Montana Water Supply Outlook

April 1, 1987

Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are termed reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. Because of the limited space, snow survey measurements are not published in monthly reports. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola, Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Denver, CO 80211
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 97102
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97208
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 547, Portland, OR 97209.

Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Montana
Water Supply Outlook

and

Federal – State – Private
Cooperative Snow Surveys

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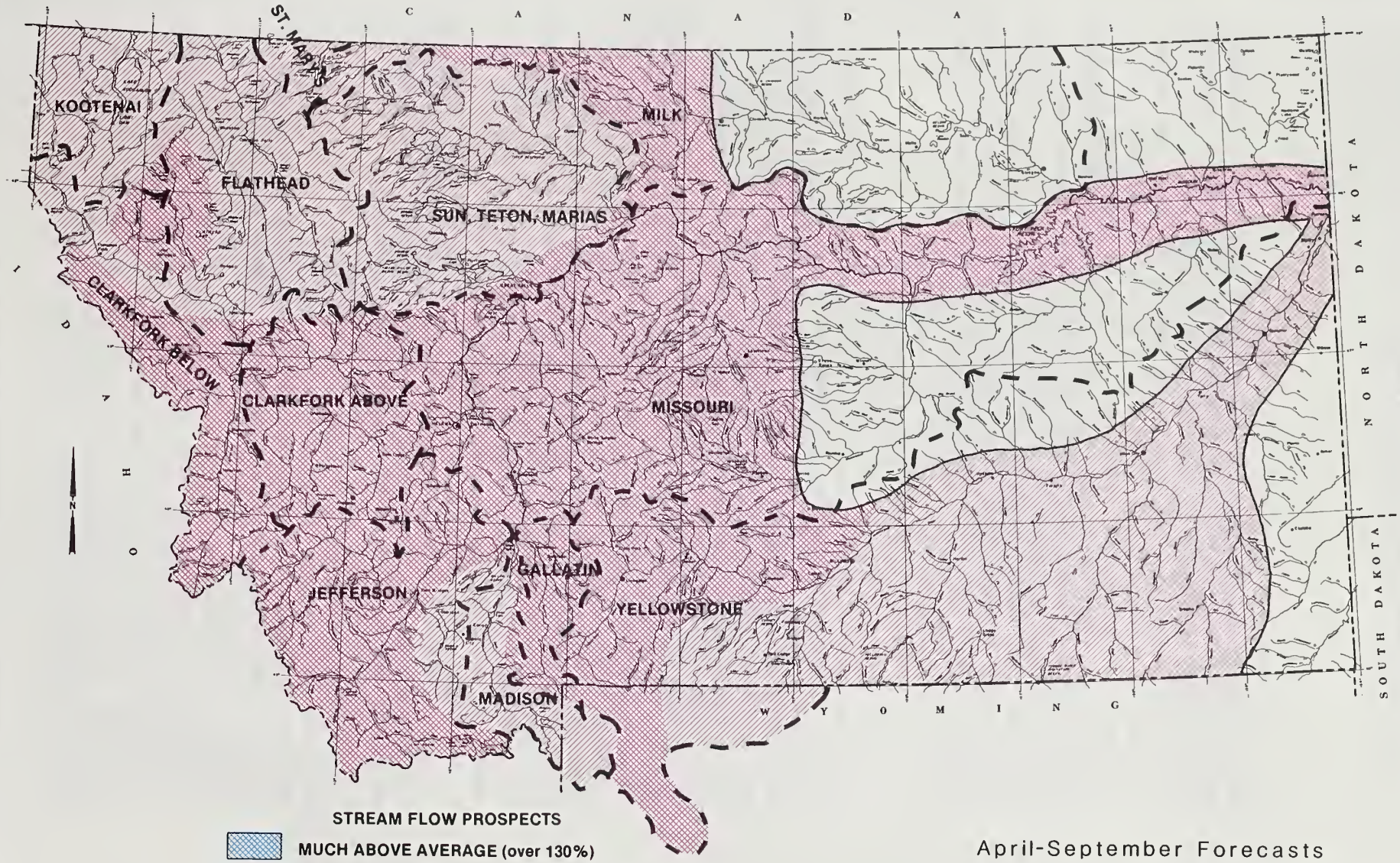
Spring and Summer Period



STREAM FLOW PROSPECTS

- MUCH ABOVE AVERAGE (over 130%)
- ABOVE AVERAGE (110-130%)
- NEAR AVERAGE (90-110%)
- BELOW AVERAGE (70-90%)
- MUCH BELOW AVERAGE (below 70%)
- NOT FORECAST

April-September Forecasts

April 1,1987

0 25 50 75 100 MI

0 50 100 150 KM

SOURCE:
Information provided by SCS Snow Survey Personnel.

JUNE 1985 4-R-39296

USDA SCS FORT WORTH, TEXAS 1985

GENERAL OUTLOOK

SUMMARY:

Mountain precipitation during March was near to above average in northern watersheds dropping to 60 percent of average in some of the southern drainages. Record low water content was measured at 22 of the 240 snow courses. Snowpack is currently 80 to 85 percent of average in northern areas and 50 to 60 percent of average in southern basins. Streamflow is forecast to be below average in all areas of the state with better percentages from northern tributaries. Runoff in some central and southern watersheds is forecast to be near record low amounts if spring precipitation is average or below. Reservoir storage is generally above average.

SNOWPACK:

Good moisture during March helped increase snowpack levels along the northern part of the state. However, most of the southern drainages show little change from last month's percentages. Statewide, all areas have below average snowpack. There were 22 snow courses out of the 240 measured that had record low water content. These are in the Philipsburg-Anaconda area, Gallatin drainage, and the Belt and Crazy Mountains. There was a little melt at some lower elevations during March but most sites showed increases in water content. Normally, the season's snowpack reaches maximum water content around mid-April so there is little time left for any significant improvement in this season's snow cover. Across the state, most snowpacks are in the 50 to 65 percent of average range. Exceptions are the northeast face of the Beartooth Mountains near Red Lodge, part of the Jefferson River drainage and most of the Flathead, Kootenai and lower Clark Fork where snow is around 75 to 85 percent of average.

PRECIPITATION:

Mountain precipitation for March was above average across the Kootenai, Flathead, St. Mary and Milk River headwaters. The Sun, Marias, Teton, lower Clark Fork and many of the Missouri Main Stem tributaries received near average moisture. The more southerly watersheds received less than average precipitation varying from about 60 percent of average in the Madison and Gallatin to about 75 percent in the Yellowstone, Jefferson and Clark Fork above Missoula drainages. This is the fourth

consecutive month of below average precipitation for most drainages in the southern part of the state. For the northern drainages, this is the first month since November that moisture was near or above average.

RESERVOIRS:

Most irrigation reservoirs have average to above average amounts of water in storage. This is due partly to good runoff last fall from September rains and partly to increasing storage through the winter in anticipation of low snowmelt runoff. Storage in larger multipurpose reservoirs is generally above average. With the anticipated low runoff, many irrigation reservoirs will be empty or nearly empty by the end of the irrigation season.

STREAMFLOW:

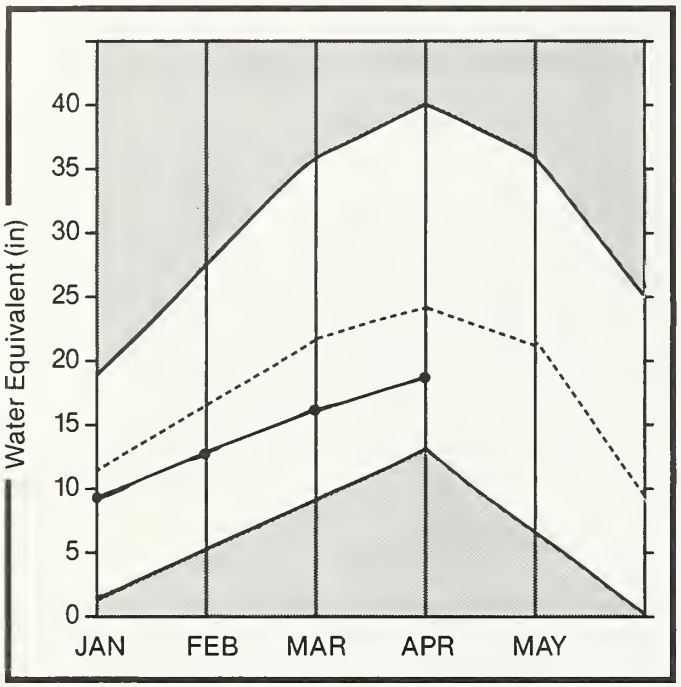
Spring and summer runoff is forecast to be below average on all streams and rivers. Some streams that have their headwaters in the smaller mountain ranges of central Montana, the Gallatin drainage and the upper Clark Fork drainage are forecast to have runoff near minimum of record if spring rainfall is near or below average. Runoff from most northern streams is forecast to be around 75 to 85 percent of average. With the exceptions of the Madison, Stillwater, Clark's Fork and Rock Creek, streams in the southern part of the state are forecast to produce less than two-thirds of their normal runoff.

SOIL MOISTURE:

Soils under the snowpack still have average or above average moisture. However, the snowline in the southern half of the state is quite high for this time of year and soils not covered with snow are drying. Storms near the end of March helped replenish some soil moisture in north-central and central Montana drainages.

Kootenai Basin

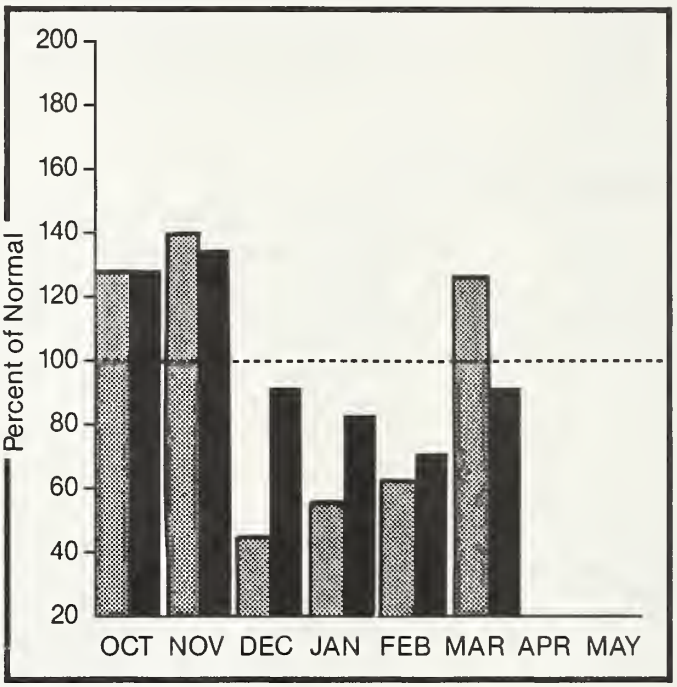
Mountain snowpack* (inches)



*Kootenai in Montana

Maximum
Minimum
Average
Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation
Year to date precipitation

WATER SUPPLY OUTLOOK:

March precipitation was a little above average. Snowpacks increased a little and are now about 15 percent below average in Canadian watersheds and about 20 percent less than average on Montana drainages. The southeastern corner of the basin has snowpacks that are about 65 to 70 percent of average. Streamflows are forecast to be 15 to 25 percent less than average during spring and summer months.

For more information contact your local Soil Conservation Service office.

KOOTENAI RIVER BASIN in Montana

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
KOOTENAI RIVER blw Libby Dam 2	APR-JUL	5885.0	5020.0	85	6140.0	104	3900.0	66
	APR-SEP	6903.0	5890.0	85	7200.0	104	4580.0	66
FISHER RIVER near Libby	APR-JUL	240.0	177.0	74	235.0	98	119.0	50
	APR-SEP	256.0	189.0	74	250.0	98	128.0	50
YAAK RIVER near Troy	APR-JUL	494.0	340.0	69	459.0	93	221.0	45
	APR-SEP	517.0	368.0	71	492.0	95	244.0	47
KOOTENAI RIVER at Leonia 2	APR-JUL	7340.0	6030.0	82	7430.0	101	4640.0	63
	APR-SEP	8441.0	6940.0	82	8540.0	101	5340.0	63

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
LAKE KOOCANUSA	5748.0	2248.0	2238.0	1786.0

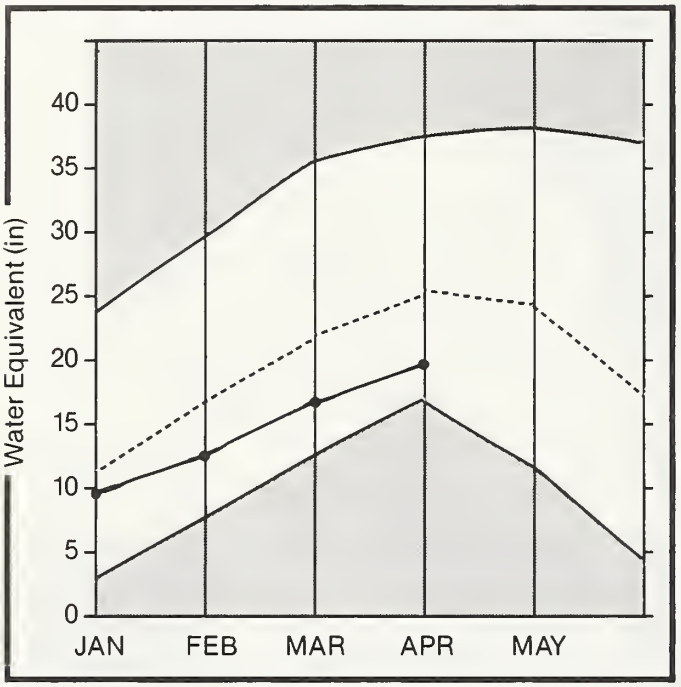
WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	THIS YEAR AS % OF AVERAGE
EAST KOOTENAI in B.C.	27	98	82
KOOTENAI in MONTANA	32	118	79
KOOTENAI ab BONNERS FERRY	58	109	80

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

Flathead Basin

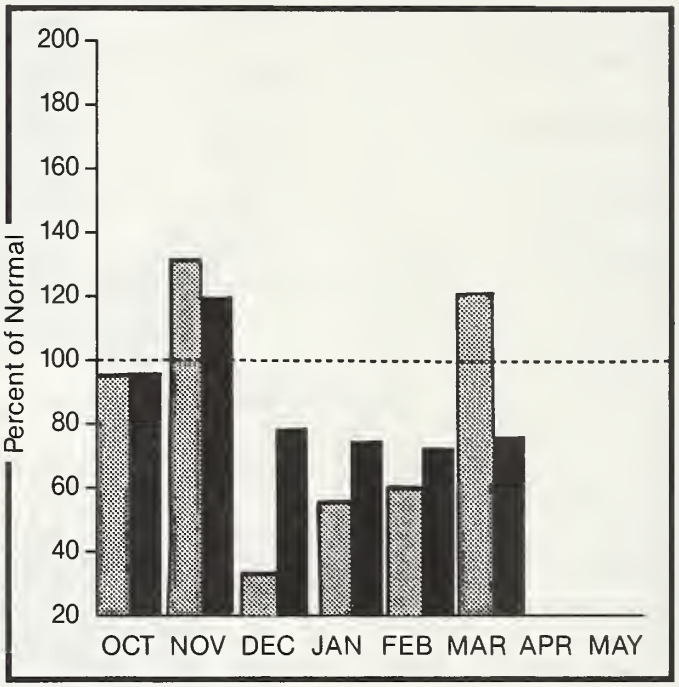
Mountain snowpack* (inches)



*Flathead

Maximum
Minimum
Average
Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation
Year to date precipitation

WATER SUPPLY OUTLOOK:

Mountain precipitation during March was a little above average. This improved the snowpack conditions over the past month. Current snowpack is about 75 to 85 percent of average over most of the basin. The area west of Kalispell is a little lower with snowcover about 65 percent of average. Spring and summer streamflows are forecast to be in the 75 to 90 percent of average range. The inflow to Little Bitterroot Lake should be in the 50 to 60 percent of average range.

For more information contact your local Soil Conservation Service office.

FLATHEAD RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
NF FLATHEAD near Columbia Falls	APR-JUL	1701.0	1450.0	85	1690.0	99	1210.0	71
	APR-SEP	1880.0	1600.0	85	1860.0	99	1340.0	71
MF FLATHEAD near West Glacier	APR-JUL	1680.0	1440.0	86	1680.0	100	1200.0	71
	APR-SEP	1836.0	1550.0	84	1810.0	99	1290.0	70
SF FLATHEAD near Columbia Falls 1	APR-JUL	2110.0	1680.0	80	2200.0	104	1150.0	55
	APR-SEP	2248.0	1800.0	80	2470.0	110	1130.0	50
FLATHEAD at Columbia Falls 1	APR-JUL	5621.0	4720.0	84	5840.0	104	3600.0	64
	APR-SEP	6114.0	5130.0	84	6540.0	107	3720.0	61
SWAN RIVER near Big Fork	APR-JUL	597.0	440.0	74	525.0	88	365.0	61
	APR-SEP	683.0	500.0	73	595.0	87	425.0	62
FLATHEAD RIVER near Polson 2	APR-JUL	6586.0	5460.0	83	6380.0	97	4540.0	69
	APR-SEP	7150.0	5950.0	83	6950.0	97	4950.0	69

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
CAMAS (4)	45.2	27.7	31.3	24.0
MISSION VALLEY (8)	100.0	35.2	50.3	40.5
HUNGRY HORSE	3451.0	2336.0	2515.0	2110.0
FLATHEAD LAKE	1791.0	641.0	805.3	757.2

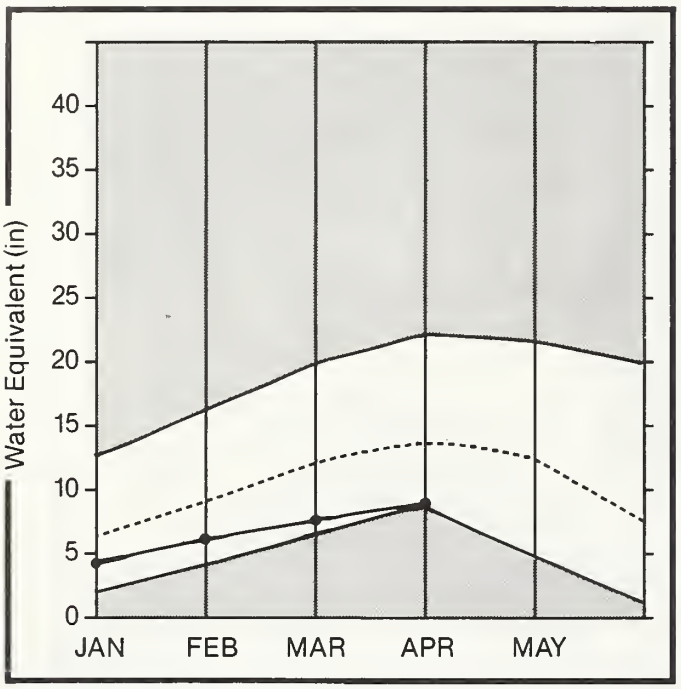
WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
NORTH FORK FLATHEAD	16	125	84
MIDDLE FORK FLATHEAD	12	106	81
SOUTH FORK FLATHEAD	13	101	72
STILLWATER-WHITEFISH	9	116	79
SWAN	11	93	72
LITTLE BITTERROOT	8	102	65
FLATHEAD	49	108	77

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

Clark Fork Basin above Missoula

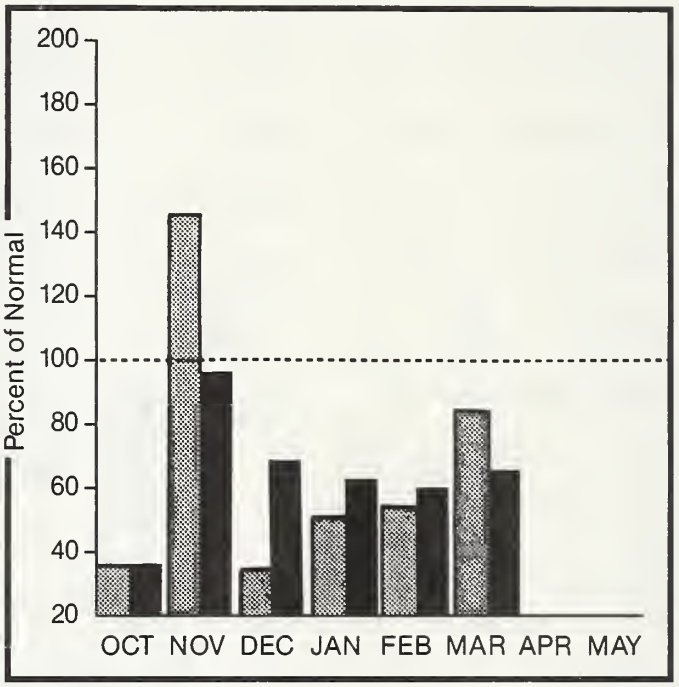
Mountain snowpack* (inches)



*Clark Fork above Missoula

Maximum
Minimum
Average
Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation
Year to date precipitation

WATER SUPPLY OUTLOOK:

March precipitation in the mountains was a little below average. The snowpack increased about 1 to 2 percent over last month's readings and is still about two-thirds of average. Some snow courses near Philipsburg and Anaconda have the lowest water content of record. Streamflows are forecast well below average at around 60 percent. It appears that this year's runoff could be near the lowest of record if spring rains follow the deficient moisture pattern of the past 4 months. Shortages of irrigation water could be widespread in the basin and can be expected to develop by mid-June.

For more information contact your local Soil Conservation Service office.

CLARK FORK RIVER BASIN above Missoula

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
MOULTON RESERVOIR Inflow (MG)2	APR-JUN	237.0	133.0	56	190.0	80	76.0	32
	APR-JUL	263.0	143.0	54	206.0	78	80.0	30
WARM SPRINGS CR at Meyers Dam 2	APR-JUL	39.0	22.0	56	31.0	79	13.0	33
	APR-SEP	49.0	28.0	57	40.0	82	16.0	33
FLINT CREEK near Southern Cross 2	APR-JUL	14.8	9.8	66	15.0	101	6.0	41
	APR-SEP	17.8	11.9	67	18.0	101	7.0	39
FLINT CREEK below Boulder Creek 2	APR-JUL	61.0	39.0	64	60.0	98	29.0	48
	APR-SEP	78.0	50.0	64	77.0	99	37.0	47
LOWER WILLOW CR RES Inflow 2	APR-JUL	14.9	6.3	42	11.0	74	3.0	20
	APR-SEP	15.8	7.3	46	13.0	82	4.0	25
M. FK. ROCK CRK near Philipsburg	APR-JUL	69.0	43.0	62	60.0	87	30.0	43
	APR-SEP	77.0	48.0	62	66.0	86	34.0	44
NEVADA CREEK near Finn	APR-JUL	21.0	9.5	45	17.0	81	4.0	19
	APR-SEP	22.0	10.3	47	18.0	82	5.0	23
BLACKFOOT RIVER near Bonner	APR-JUL	874.0	530.0	61	650.0	74	410.0	47
	APR-SEP	969.0	600.0	62	740.0	76	460.0	47
CLARK FORK RIVER above Milltown 2	APR-JUL	703.0	425.0	60	635.0	90	215.0	31
	APR-SEP	812.0	500.0	62	745.0	92	255.0	31
CLARK FORK RIVER above Missoula	APR-JUL	1577.0	950.0	60	1330.0	84	570.0	36
	APR-SEP	1781.0	1100.0	62	1530.0	86	670.0	38

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
GEORGETOWN LAKE	31.0	29.1	25.4	24.4
LOWER WILLOW CREEK	4.9	1.7	4.9	2.2
NEVADA CREEK	12.6	6.0	11.0	7.5

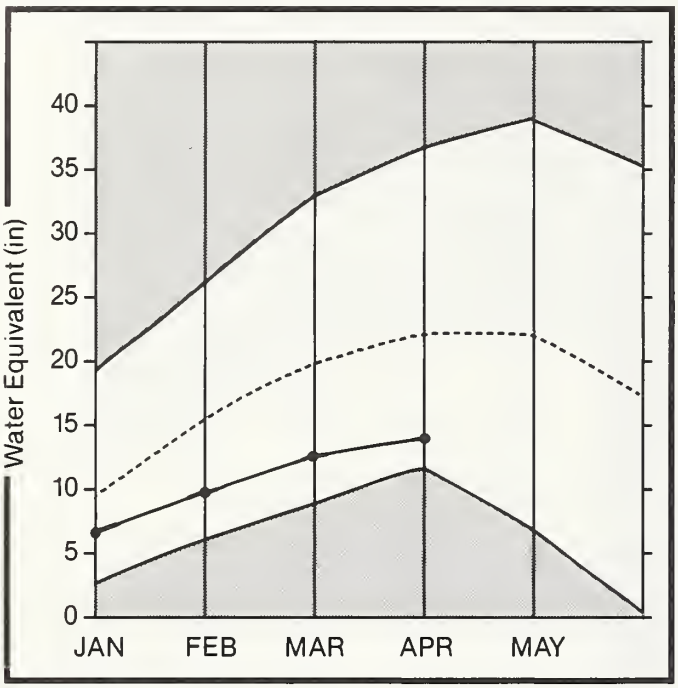
WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
CLARK FORK ab BLACKFOOT	46	76	65
BLACKFOOT	22	92	63
CLARK FORK above MISSOULA	62	80	64

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

Clark Fork Basin below Missoula

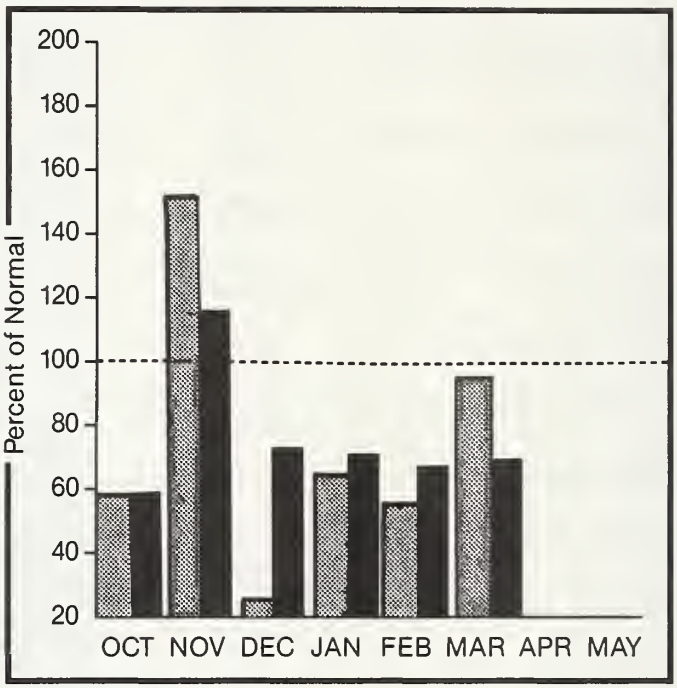
Mountain snowpack* (inches)



*Bitterroot

Maximum
Minimum
Average
Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation
Year to date precipitation

WATER SUPPLY OUTLOOK:

Mountain precipitation was near average over the basin in March. The snowpack levels did show a little improvement on the lower Clark Fork tributaries but there was no significant change in the Bitterroot. Streamflows are still forecast well below average in all drainages with most predictions being about two-thirds of their normal runoff. This year's runoff could be near the lowest of record if spring rainfall is average or below. Irrigation water supplies are expected to become short by late June to early July on streams not having stored water.

For more information contact your local Soil Conservation Service office.

CLARK FORK RIVER BASIN below Missoula

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
CLARK FORK RIVER above Missoula	APR-JUL	1577.0	950.0	60	1330.0	84	570.0	36
	APR-SEP	1781.0	1100.0	62	1530.0	86	670.0	38
W.F. BITTERROOT RIVER nr Conner 2	APR-JUL	147.0	87.0	59	122.0	83	52.0	35
	APR-SEP	169.0	101.0	60	142.0	84	60.0	36
BITTERROOT RIVER near Darby	APR-JUL	524.0	315.0	60	440.0	84	190.0	36
	APR-SEP	573.0	345.0	60	480.0	84	225.0	39
SKALKAHO CREEK near Hamilton	APR-JUL	46.0	29.0	63	35.0	76	23.0	50
	APR-SEP	54.0	34.0	63	42.0	78	26.0	48
BURNT FORK CR nr Stevensville 2	APR-JUL	32.0	19.8	62	27.0	84	12.0	38
	APR-SEP	38.0	23.0	61	32.0	84	14.0	37
BITTERROOT RIVER at Missoula 2	APR-JUL	1371.0	795.0	58	1120.0	82	470.0	34
	APR-SEP	1497.0	870.0	58	1230.0	82	510.0	34
CLARK FORK RIVER below Missoula	APR-JUL	2948.0	1740.0	59	2210.0	75	1270.0	43
	APR-SEP	3276.0	1980.0	60	2500.0	76	1460.0	45
CLARK FORK RIVER at St. Regis	APR-JUL	3894.0	2350.0	60	3320.0	85	1380.0	35
	APR-SEP	4325.0	2620.0	61	3700.0	86	1540.0	36
CLARK FORK RIVER near Plains 2	APR-JUL	10850.0	7990.0	74	10000.0	92	5930.0	55
	APR-SEP	11930.0	8790.0	74	11000.0	92	6520.0	55
THOMPSON RIVER near Thompson Falls	APR-JUL	222.0	134.0	60	183.0	82	85.0	38
	APR-SEP	250.0	158.0	63	215.0	86	100.0	40
PROSPECT CREEK at Thompson Falls	APR-JUL	128.0	85.0	66	116.0	91	54.0	42
	APR-SEP	137.0	93.0	68	126.0	92	60.0	44
CLARK FORK at Whitehorse Rapids 2	APR-JUL	12150.0	8820.0	73	11200.0	92	6400.0	53
	APR-SEP	13370.0	9710.0	73	12400.0	93	7040.0	53

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
PAINTED ROCKS LAKE		NO REPORT		
NOXON RAPIDS	335.0	326.7	299.8	213.0
COMO	34.9	10.9	23.0	15.5

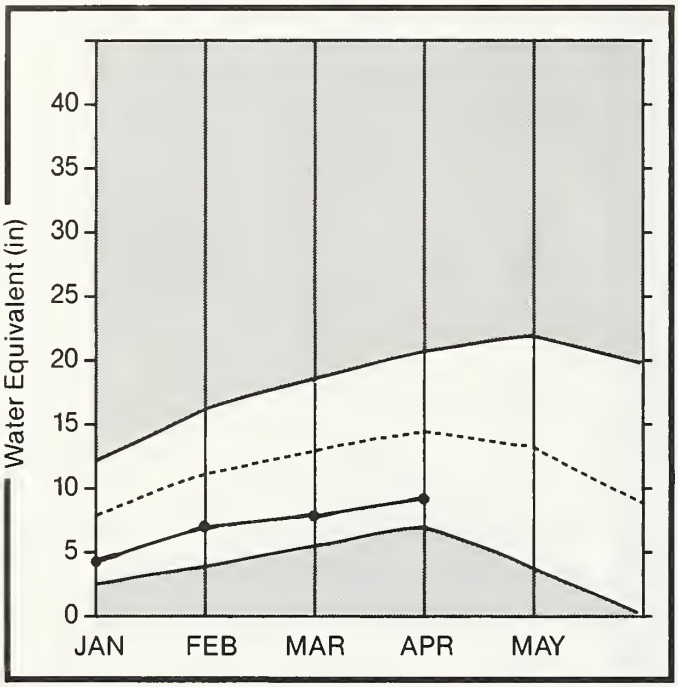
WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
CLARK FORK above MISSOULA	62	80	64
BITTERROOT	24	78	63
LWR CLARK FK blw MISSOULA	25	100	71
BITTERROOT & LWR C.F.	47	90	68
CLARK FORK TOTAL	103	87	66
FLATHEAD	49	108	77
PEND O'REILLE	146	94	71

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

Jefferson Basin

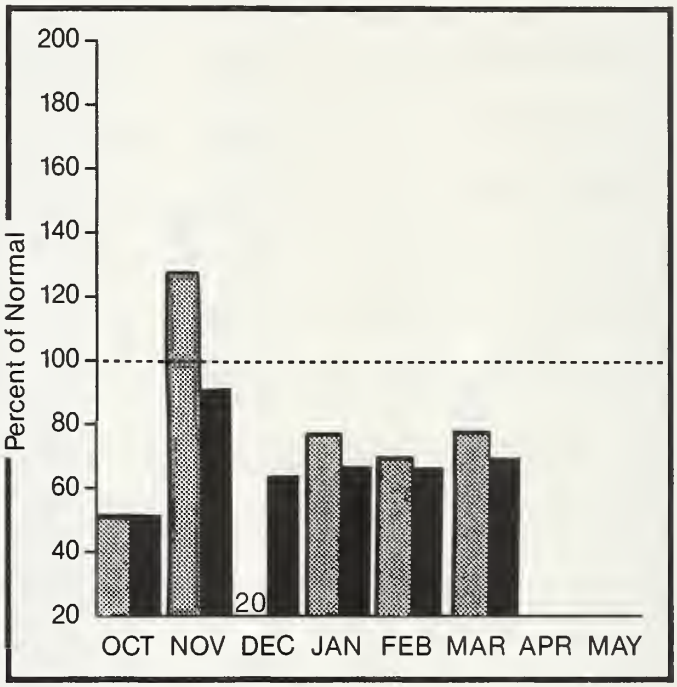
Mountain snowpack* (inches)



*Jefferson

Maximum
Minimum
Average
Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation
Year to date precipitation

WATER SUPPLY OUTLOOK:

Mountain precipitation during March was a little below average over the basin. This is the fourth consecutive month with below average precipitation. This resulted in only slight increases in snowpack percentages. Currently, most snowpacks are in the 65 to 70 percent of average range. Streamflows are forecast to be below average in all drainages and generally in the 60 to 75 percent of average range. Shortages in irrigation water supplies can be expected to develop by late June to early July on streams not having stored water.

For more information contact your local Soil Conservation Service office.

JEFFERSON RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
RED ROCK RIVER near Monida 2	APR-JUL	105.0	68.0	65	100.0	95	37.0	35
	APR-SEP	114.0	72.0	63	106.0	93	38.0	33
BEAVERHEAD RIVER near Grant 2	APR-JUL	149.0	92.0	62	137.0	92	47.0	32
	APR-SEP	174.0	106.0	61	158.0	91	60.0	34
BEAVERHEAD RIVER at Barratts 2	APR-JUL	192.0	124.0	65	182.0	95	75.0	39
	APR-SEP	224.0	147.0	66	215.0	96	94.0	42
RUBY RIVER near Alder	APR-JUL	89.0	67.0	75	89.0	100	55.0	62
	APR-SEP	106.0	80.0	75	107.0	101	69.0	65
BIG HOLE RIVER near Melrose	APR-JUL	696.0	440.0	63	615.0	88	295.0	42
	APR-SEP	757.0	470.0	62	660.0	87	335.0	44
WILLOW CREEK near Harrison	APR-JUL	18.7	14.5	78	20.0	107	9.0	48
	APR-SEP	21.0	15.8	75	22.0	105	10.0	48

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
LIMA	84.0	34.5	29.2	41.3
CLARK CANYON	255.6	165.9	158.3	152.7
RUBY RIVER	38.8	36.0	34.0	31.0

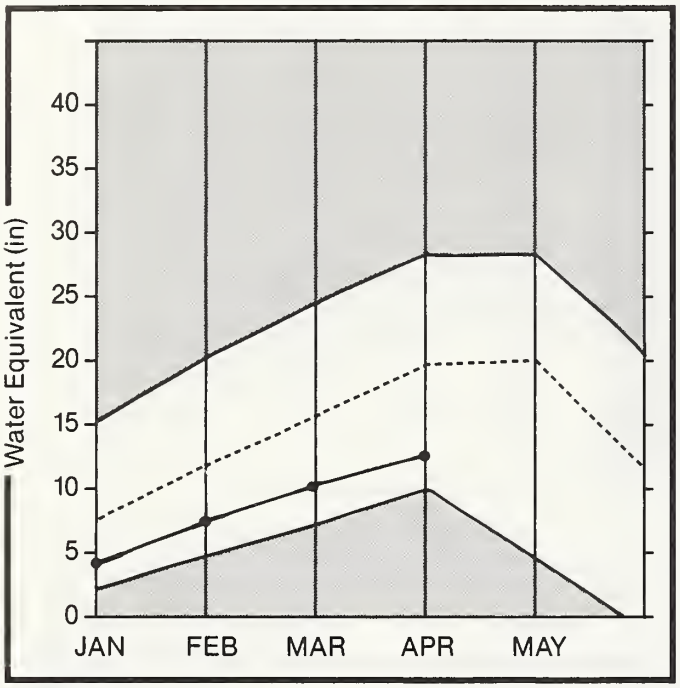
WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
BEAVERHEAD	35	71	68
RUBY	14	87	75
BIGHOLE	29	70	64
BOULDER	15	77	67
JEFFERSON	74	73	67

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

Madison Basin

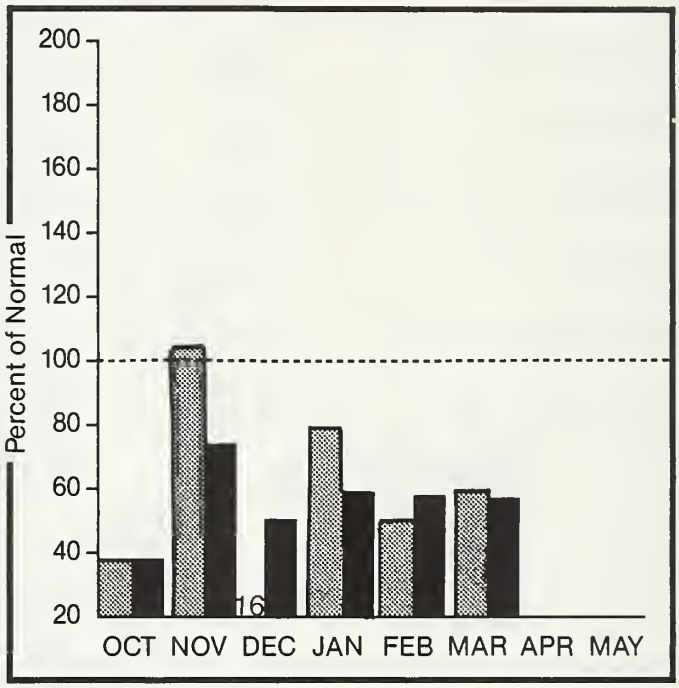
Mountain snowpack* (inches)



*Madison

Maximum
Minimum
Average
Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation
Year to date precipitation

WATER SUPPLY OUTLOOK:

March precipitation was about two-thirds of average over the basin. This is the fourth consecutive month of below average moisture. Snowpack levels are about the same as measured a month ago and still in the 55 to 65 percent of average range. Snowpack in the Yellowstone National Park area is a little lower than in the Madison, Gravelly and Tobacco Root ranges. Streamflows in the upper Madison will be held up by flows from springs. Runoff during spring and summer months will be about 25 percent less than average. Shortages of irrigation water from tributaries can be expected to develop by late June and early July.

For more information contact your local Soil Conservation Service office.

MADISON RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
MADISON RIVER near Grayling 2	APR-JUL	390.0	320.0	82	380.0	97	260.0	67
	APR-SEP	499.0	410.0	82	485.0	97	335.0	67
MADISON RIVER near McAllister 2	APR-JUL	680.0	515.0	76	625.0	92	405.0	60
	APR-SEP	856.0	640.0	75	775.0	91	500.0	58

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
ENNIS LAKE	41.0	30.2	31.4	33.7
HEBGEN LAKE	377.5	289.8	278.5	241.1

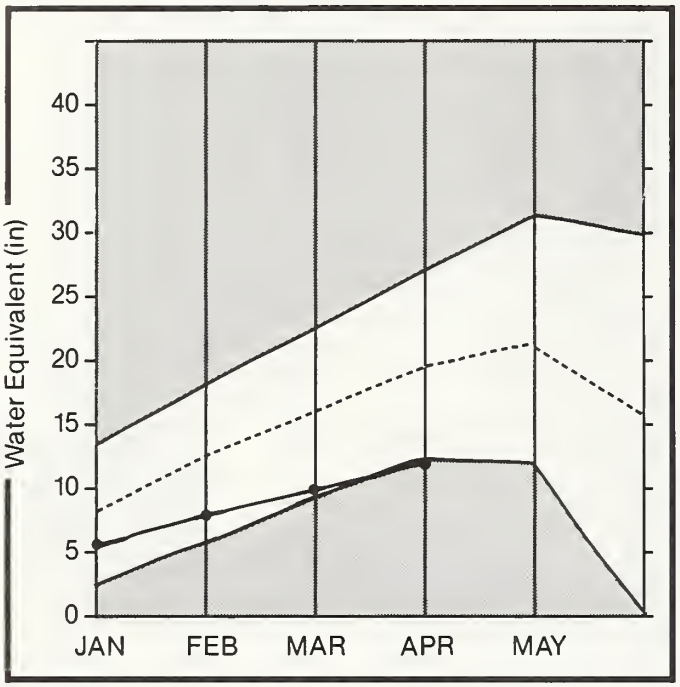
WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
MADISON above HEBGEN	17	52	55
LOWER MADISON	21	77	67
MADISON	38	63	61

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

Gallatin Basin

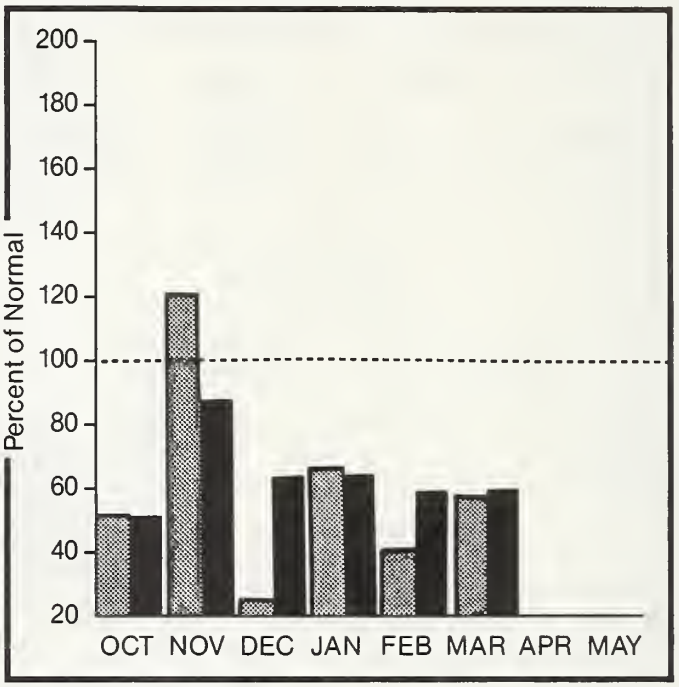
Mountain snowpack* (inches)



*Gallatin

Maximum
Minimum
Average
Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation
Year to date precipitation

WATER SUPPLY OUTLOOK:

Mountain precipitation over the basin was about 60 percent of average in March. This is the fourth consecutive month of below average moisture. Snowpack levels are about the same as a month ago and about two-thirds of average. A few snow courses had the lowest water content of record for April 1. Spring and summer streamflows are forecast to be around 65 to 70 percent of average in headwater drainages and near 50 percent of average on the lower Gallatin. Runoff is expected to be near the lowest of record if spring precipitation is average or below. Shortages in irrigation water are expected to start developing by late June to early July.

For more information contact your local Soil Conservation Service office.

GALLATIN RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
GALLATIN RIVER near Gateway	APR-JUL	460.0	285.0	62	360.0	78	265.0	58
	APR-SEP	540.0	340.0	63	425.0	79	320.0	59
E & W FK. HYALITE CR. nr Bozeman 2	APR-JUL	24.0	17.3	72	21.0	88	14.0	58
	APR-SEP	28.0	20.1	72	24.0	86	17.0	61
HYALITE CREEK near Bozeman 2	APR-JUL	38.0	27.0	71	35.0	92	20.0	53
	APR-SEP	44.0	31.0	70	40.0	91	24.0	55
GALLATIN RIVER at Logan	APR-JUL	528.0	250.0	47	380.0	72	165.0	31
	APR-SEP	616.0	300.0	49	455.0	74	230.0	37

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
MIDDLE CREEK	8.0	5.1	5.9	3.9

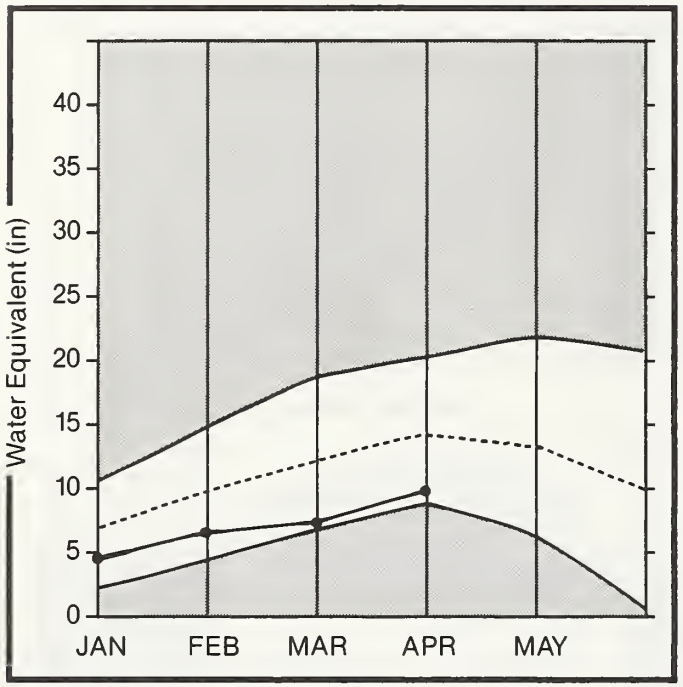
WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
UPPER GALLATIN	15	75	63
EAST GALLATIN	13	91	62
GALLATIN	25	80	62

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

Missouri Basin

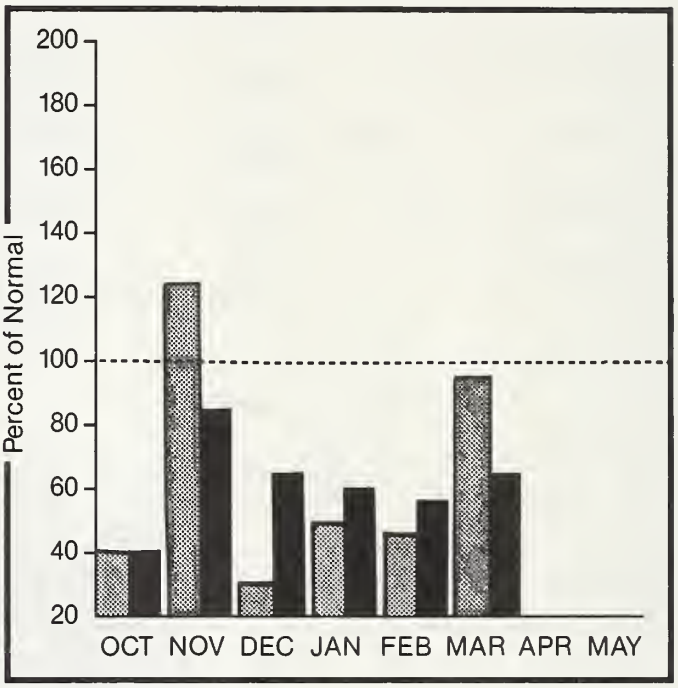
Mountain snowpack* (inches)



*Missouri Toston to Fort Peck

Maximum
Minimum
Average
Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation
Year to date precipitation

WATER SUPPLY OUTLOOK:

Mountain precipitation across the basin was about average in March. This helped to slightly increase snowpack level percentages in most drainages. The greatest increase was in the Judith and Musselshell drainages but snowpacks are still well below average. Some snow courses in the Belt and Crazy Mountains have the lowest water contents of record. Streamflows are forecast to be well below average in all drainages. Runoff is expected to be near previous lows if spring precipitation continues to be near or below average. Shortages of irrigation water supplies can be expected by mid- to late June on streams not having stored water.

For more information contact your local Soil Conservation Service office.

MISSOURI RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
MISSOURI RIVER at Toston 2	APR-JUL	2250.0	1375.0	61	2120.0	94	1010.0	45
	APR-SEP	2590.0	1580.0	61	2430.0	94	1160.0	45
SHEEP CREEK nr White Sulphur Spgs.	APR-JUL	18.8	8.7	46	16.0	85	7.0	37
	APR-SEP	22.0	10.4	47	19.0	86	8.0	36
BELT CREEK near Monarch	APR-JUL	123.0	60.0	49	102.0	83	33.0	27
	APR-SEP	134.0	65.0	49	111.0	83	36.0	27
MISSOURI RIVER at Fort Benton 2	APR-JUL	3470.0	1978.0	57	3330.0	96	1560.0	45
	APR-SEP	3990.0	2265.0	57	3830.0	96	1800.0	45
MISSOURI RIVER at Virgelle 2	APR-JUL	3960.0	2340.0	59	3920.0	99	1780.0	45
	APR-SEP	4500.0	2650.0	59	4460.0	99	2020.0	45
MISSOURI RIVER near Landusky 2	APR-JUL	4310.0	2540.0	59	4480.0	104	1980.0	46
	APR-SEP	4900.0	2905.0	59	5100.0	104	2250.0	46
N.F. MUSSELSHELL near Delpine	APR-JUL	5.6	1.8	32	4.0	71	1.0	18
	APR-SEP	6.4	2.2	34	5.0	78	1.0	16
S.F. MUSSELSHELL above Martinsdale	APR-JUL	57.0	22.0	39	44.0	77	10.0	18
	APR-SEP	61.0	23.0	38	46.0	75	11.0	18
MISSOURI RIVER below Fort Peck 2	APR-JUL	4260.0	2430.0	57	4390.0	103	1790.0	42
	APR-SEP	4800.0	2745.0	57	4940.0	103	2020.0	42
LAKE SAKAKAWEA Inflow 2	APR-JUL	11000.0	7480.0	68	11900.0	108	5830.0	53
	APR-SEP	12200.0	8250.0	68	13200.0	108	6470.0	53

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
CANYON FERRY LAKE	2043.0	1566.0	1487.0	1502.0
HELENA VALLEY	9.2	3.9	3.3	4.8
LAKE HELENA	10.4	10.9	10.9	10.0
HAUSER & HELENA	61.9	63.1	63.0	60.6
HOLTER LAKE	81.9	69.9	80.5	65.0
SMITH RIVER	10.6	8.4	7.5	7.8
NEWLAN CREEK	12.4	10.6	10.4	8.9
BAIR	7.0	6.6	3.2	5.0
MARTINSDALE	23.1	12.8	9.8	10.2
DEADMAN'S BASIN	72.2	64.0	37.4	52.0
FORT PECK LAKE *	18.9	15.9	14.2	15.1

*Millon acre feet

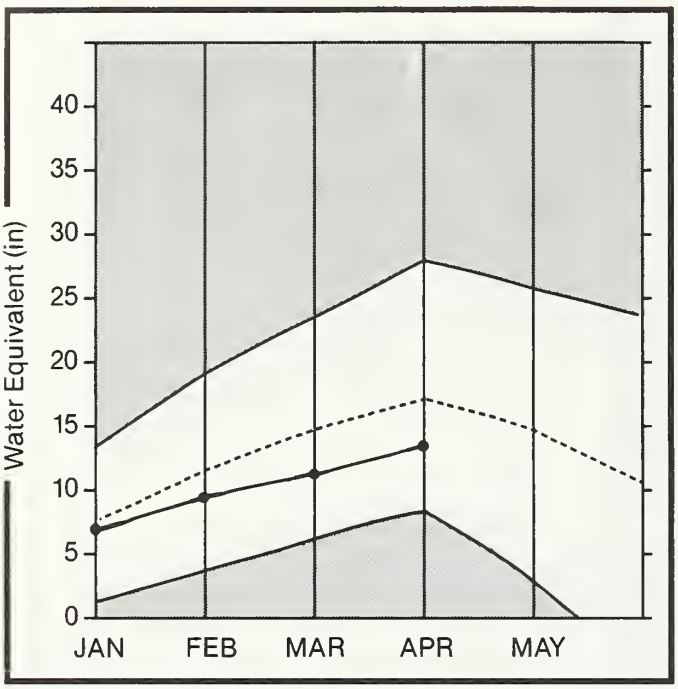
WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
MISSOURI HEADWATERS	120	70	64
WEST SIDE MISSOURI	11	79	63
SMITH-BELT	11	62	55
MISSOURI MAINSTEM	22	69	59
SUN-TETON-MARIAS	19	107	81
JUDITH-MUSSELSHELL	19	71	58
MISSOURI above FORT PECK	165	75	65
MILK HEADWATERS	5	138	81
BEAR PAW	7	304	50
MILK RIVER	12	149	74
MISSOURI in MONTANA	174	76	65
MISSOURI blw YELLOWSTONE	283	73	70

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

Sun, Teton and Marias Basins

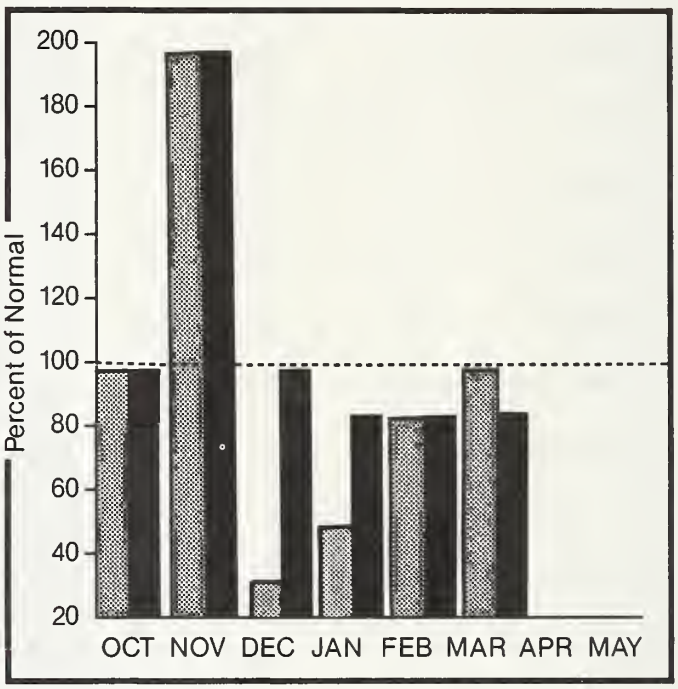
Mountain snowpack* (inches)



*Sun-Teton-Marias

Maximum
Minimum
Average
Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation
Year to date precipitation

WATER SUPPLY OUTLOOK:

Mountain precipitation in March was near average over the basin. This increased the snowpack percentages 4 to 6 percent over those reported on March 1. However, the snowpack is still 15 to 20 percent below average. Spring and summer streamflows are forecast to be below average and in the 70 to 85 percent of average range. Some shortages of irrigation water may develop in July on streams not having stored water.

For more information contact your local Soil Conservation Service office.

SUN-TETON-MARIAS RIVER BASINS

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
SUN RIVER at Gibson Dam 2	APR-JUL	494.0	360.0	73	470.0	95	250.0	51
	APR-SEP	542.0	400.0	74	520.0	96	280.0	52
TWO MEDICINE CREEK near Browning 2	APR-JUL	222.0	178.0	80	250.0	113	105.0	47
	APR-SEP	235.0	188.0	80	260.0	111	115.0	49
BADGER CREEK near Browning	APR-JUL	107.0	94.0	88	130.0	121	58.0	54
	APR-SEP	123.0	109.0	89	148.0	120	70.0	57
SWIFT RESERVOIR Inflow nr Dupuyer	APR-JUL	70.0	60.0	86	84.0	120	36.0	51
	APR-SEP	82.0	70.0	85	96.0	117	44.0	54
CUT BANK CREEK at Cut Bank	APR-JUL	92.0	80.0	87	111.0	121	49.0	53
	APR-SEP	100.0	88.0	88	120.0	120	56.0	56
MARIAS RIVER near Shelby	APR-JUL	478.0	360.0	75	515.0	108	210.0	44
	APR-SEP	501.0	385.0	77	545.0	109	225.0	45

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
GIBSON	99.1	63.2	72.6	48.9
PISHKUN	32.0	17.2	18.0	18.7
WILLOW CREEK	32.2	28.5	26.2	21.5
LOWER TWO MEDICINE LAKE	11.9	12.0	---	9.0
FOUR HORNS LAKE	19.2	13.5	---	12.4
SWIFT	30.0	23.7	9.9	16.4
LAKE FRANCES	112.0	83.9	94.5	69.6
LAKE ELWELL (TIBER)	1347.0	696.6	784.8	572.2

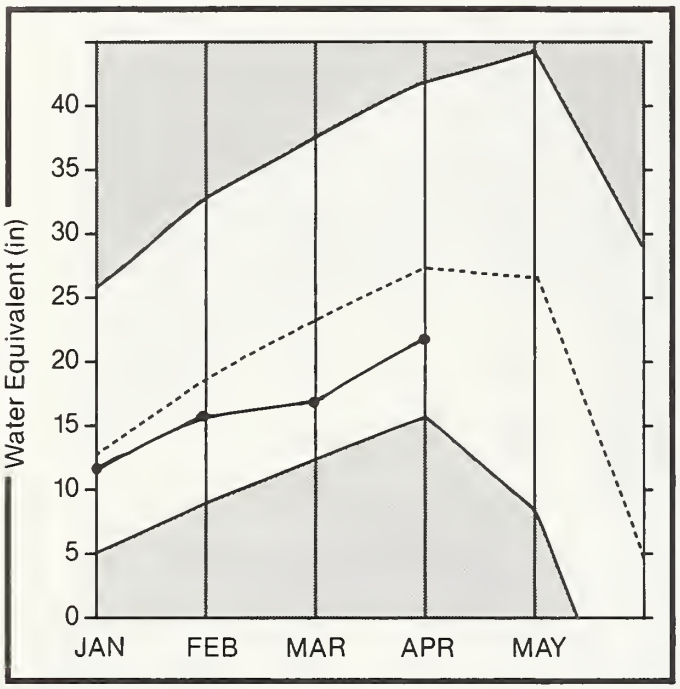
WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
SUN-TETON	13	110	78
MARIAS	7	105	84
SUN-TETON-MARIAS	19	107	81

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

St. Mary and Milk Basins

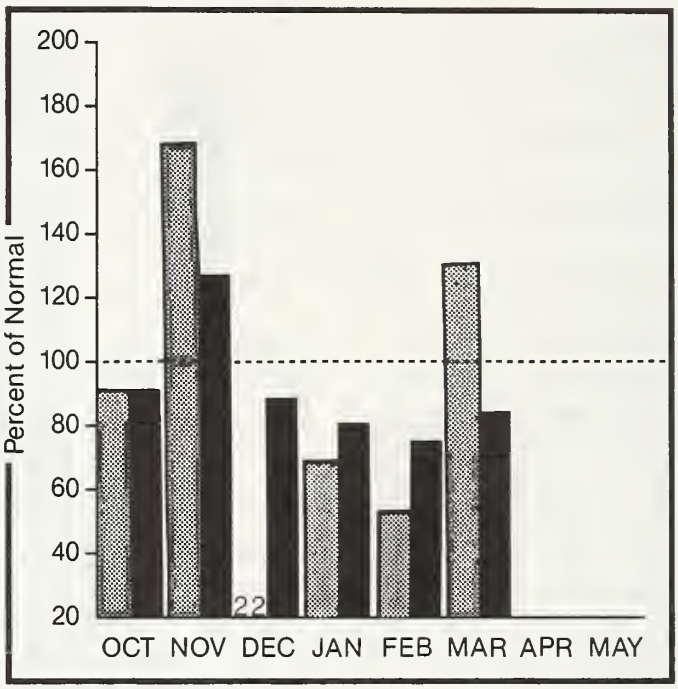
Mountain snowpack* (inches)



*St. Mary

Maximum
Average
Minimum
Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation
Year to date precipitation

WATER SUPPLY OUTLOOK:

March precipitation in the mountains was a little above average. This increased the snowpack levels in all areas except the Bear Paws where snow levels are still about one-half of average. The headwaters of the Milk and St. Mary have snowpacks about 20 percent less than average. Recent snowfall in the valley areas added moisture to the soil. Some shortages of irrigation water may develop for those not having stored water. Reservoir storage is above averge.

For more information contact your local Soil Conservation Service office.

ST. MARY and MILK RIVER BASINS

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
SWIFTCURRENT CREEK at Sherburne 2	APR-JUL	110.0	89.0	81	111.0	101	67.0	61
	APR-SEP	128.0	105.0	82	131.0	102	79.0	62
ST. MARY RIVER near Babb 2	APR-JUL	404.0	325.0	80	380.0	94	270.0	67
	APR-SEP	474.0	385.0	81	450.0	95	320.0	68
MILK RIVER at Eastern Crossing	APR-SEP	239.0	233.0	97				
MILK RIVER at Eastern Crossing 2	APR-SEP	73.0	47.0	64	80.0	110	39.0	53

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
LAKE SHERBURNE	64.3	25.6	50.5	23.3
FRESNO	127.0	86.8	99.7	77.3
BEAVER CREEK	3.5	3.3	3.3	2.3
NELSON	66.8	41.4	49.4	36.6

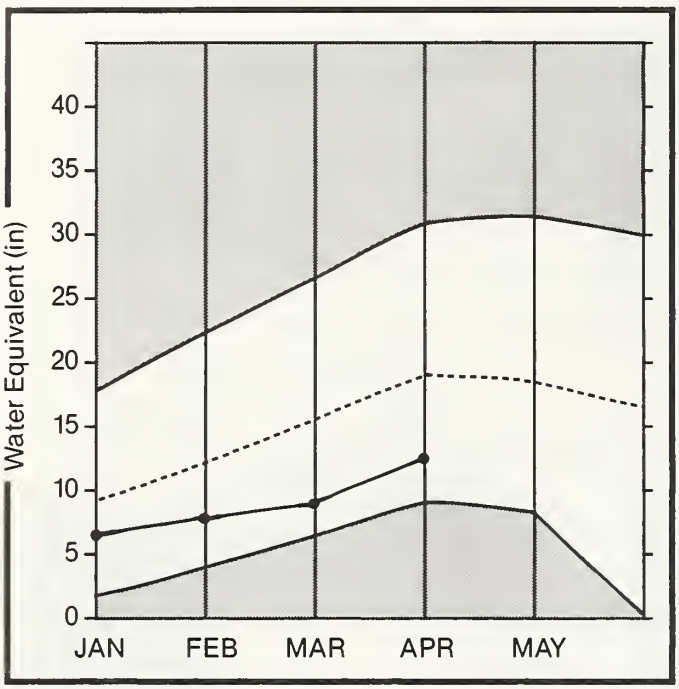
WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	THIS YEAR AS % OF AVERAGE
MILK HEADWATERS	5	138	81
BEAR PAW	7	304	50
MILK RIVER	12	149	74
ST. MARY	8	130	79
ST. MARY and MILK	15	138	75
BOW RIVER in ALBERTA	18	82	95
OLDMAN RIVER in ALBERTA	6	131	95

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

Yellowstone Basin

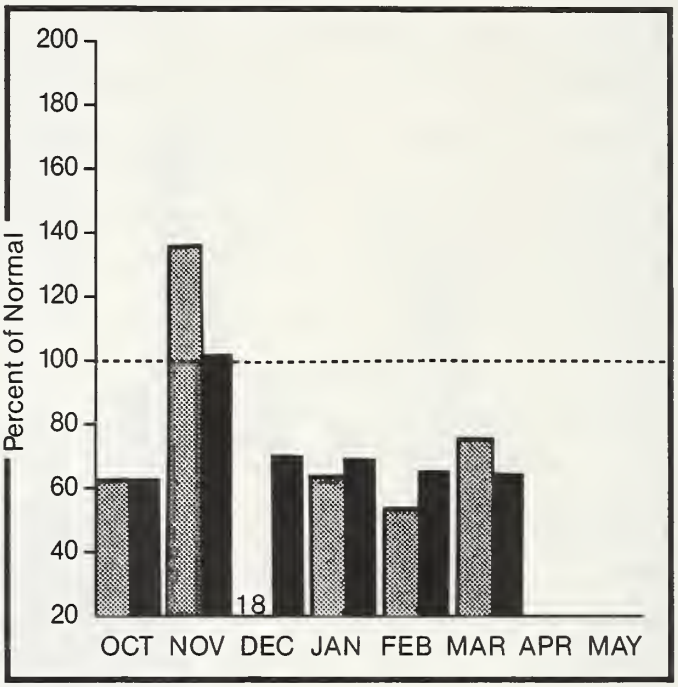
Mountain snowpack* (inches)



*Yellowstone above Big Horn

Maximum
Minimum
Average
Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation
Year to date precipitation

WATER SUPPLY OUTLOOK:

Mountain precipitation during March was below average for the fourth consecutive month. Snowpack levels increased slightly in most drainages but are still well below average in the upper Yellowstone. Snow courses in the Crazy Mountains have the lowest water content of record. Snow cover in Wyoming headwaters is a little better but generally below average in all areas except the Wind River. Streamflows are forecast to be in the 65 to 85 percent of average range over the basin. Lower percentages are in the Yellowstone River headwaters in Yellowstone National Park and the Shields River. Irrigation water supplies are expected to become short by late June on smaller streams not having stored water and by early to mid-July on larger tributaries.

For more information contact your local Soil Conservation Service office.

YELLOWSTONE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
YELLOWSTONE at Lake Outlet	APR-JUL	590.0	405.0	69	480.0	81	330.0	56
	APR-SEP	818.0	565.0	69	670.0	82	460.0	56
YELLOWSTONE at Corwin Springs	APR-JUL	1650.0	1070.0	65	1300.0	79	910.0	55
	APR-SEP	2000.0	1290.0	65	1570.0	79	1100.0	55
YELLOWSTONE near Livingston	APR-JUL	1920.0	1190.0	62	1460.0	76	1100.0	57
	APR-SEP	2330.0	1450.0	62	1780.0	76	1360.0	58
BOULDER RIVER at Big Timber	APR-JUL	353.0	250.0	71	330.0	93	205.0	58
	APR-SEP	384.0	260.0	68	345.0	90	220.0	57
STILLWATER RIVER nr Absarokee 2	APR-JUL	524.0	415.0	79	575.0	110	265.0	51
	APR-SEP	625.0	500.0	80	690.0	110	315.0	50
CLARKS FORK RIVER near Belfry	APR-JUL	540.0	420.0	78	555.0	103	285.0	53
	APR-SEP	603.0	465.0	77	615.0	102	315.0	52
COONEY RESERVOIR Inflow	APR-JUL	49.0	42.0	86	57.0	116	27.0	55
	APR-SEP	60.0	52.0	87	70.0	117	34.0	57
YELLOWSTONE RIVER at Billings	APR-JUL	3740.0	2600.0	70	3330.0	89	2100.0	56
	APR-SEP	4410.0	3085.0	70	3930.0	89	2470.0	56
BIGHORN RIVER near St. Xavier 2	APR-JUL	1750.0	1580.0	90	2470.0	141	980.0	56
	APR-SEP	1900.0	1718.0	90	2680.0	141	1060.0	56
LITTLE BIGHORN RIVER near Hardin	APR-JUL	148.0	125.0	84	215.0	145	53.0	36
	APR-SEP	167.0	142.0	85	245.0	147	60.0	36
TONGUE RIVER near Decker	APR-JUL	234.0	205.0	88	330.0	141	86.0	37
	APR-SEP	260.0	230.0	88	365.0	140	96.0	37
YELLOWSTONE RIVER at Miles City 2	APR-JUL	5640.0	4230.0	75	5980.0	106	2930.0	52
	APR-SEP	6510.0	4875.0	75	6900.0	106	3390.0	52
POWDER RIVER at Moorehead	APR-JUL	230.0	205.0	89	340.0	148	78.0	34
	APR-SEP	251.0	223.0	89	370.0	147	85.0	34
YELLOWSTONE RIVER near Sidney 2	APR-JUL	6260.0	4630.0	74	6760.0	108	3070.0	49
	APR-SEP	7200.0	5348.0	74	7780.0	108	3530.0	49

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
MYSTIC LAKE	21.0	1.6	0.3	3.6
COONEY	27.4	22.1	22.0	15.9
BIGHORN LAKE	1356.0	807.2	709.6	685.0
TONGUE RIVER	68.0	23.6	30.2	37.0

WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
YELLOWSTONE ab LIVINGSTON	25	57	60
SHIELDS	10	83	55
BOULDER-STILLWATER	12	87	78
CLARK'S FORK-ROCK CREEK	22	63	67
YELLOWSTONE above BIGHORN	55	70	66
LITTLE BIGHORN	5	72	79
WIND RIVER (Wyoming)	31	70	105
BIGHORN RIVER (Wyoming)	34	65	79
BIGHORN BASIN (Total)	60	69	88
TONGUE RIVER (Wyoming)	15	74	84
POWDER RIVER (Wyoming)	15	71	83
YELLOWSTONE RIVER	125	70	76

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

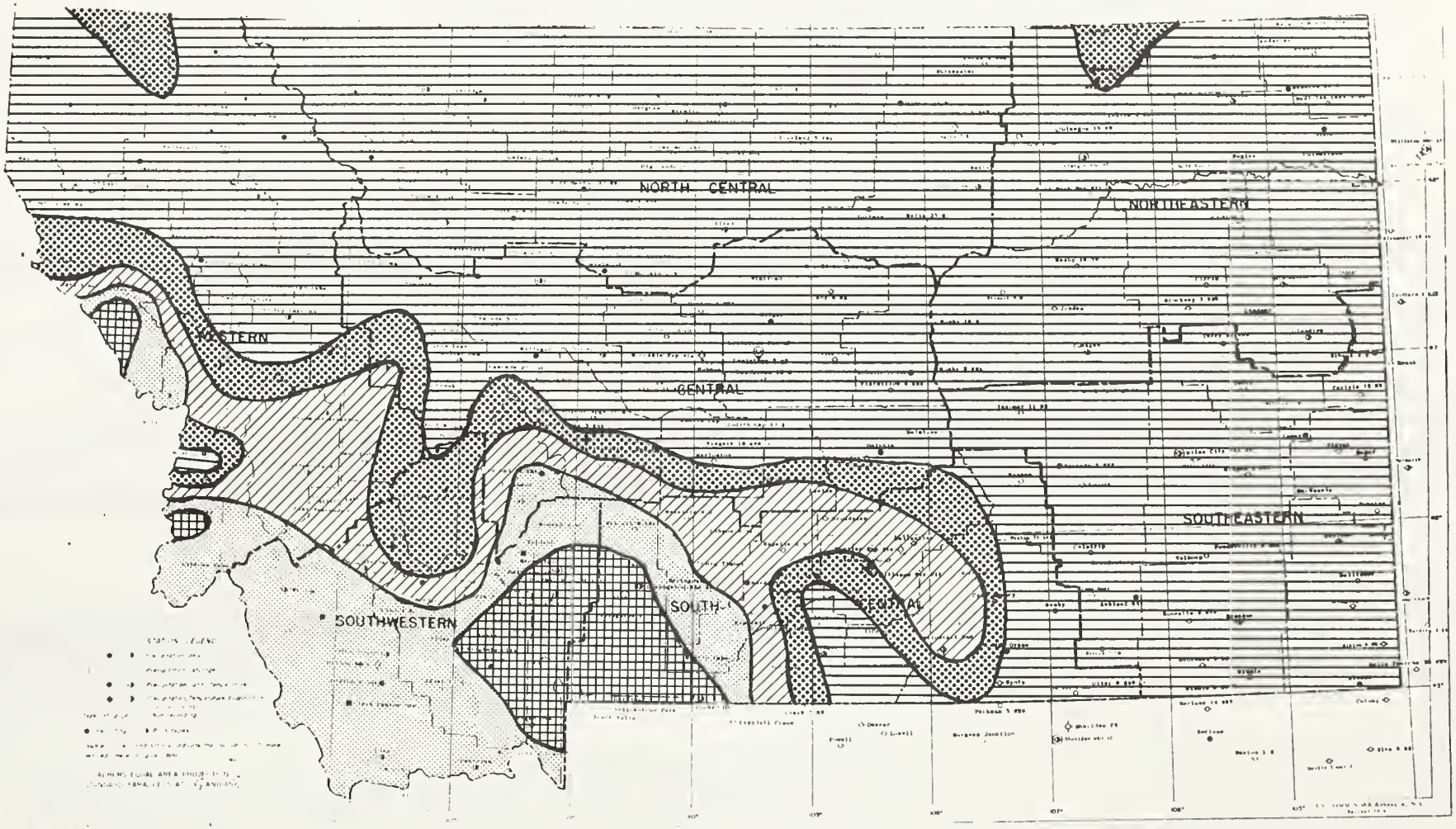
Snow Data Measurements

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
MONTANA						
ABUNDANCE LAKE	8800	3/29/87	52	14.9	19.0	21.5
AMBROSE	6480	3/31/87	28	8.1	10.3	13.6
ARCH FALLS	7350	3/31/87	31	8.8	9.8	13.2
ASHLEY DIVIDE	4820	4/02/87	14	4.2	4.7	7.0
BADGER PASS PILLOW	6900	4/01/87	---	30.3	35.1	36.4
BADGER PASS	6900	3/31/87	87	31.2	35.9	38.8
BALD EAGLE PEAK	5700	4/01/87	133	50.7	43.1	61.9
BALD RIDGE	7500	3/31/87	29	8.3	9.7	13.9
BANFIELD MTN PILLOW	5600	4/03/87	---	16.2	15.1	21.1
BANFIELD MOUNTAIN	5600	4/03/87	49	22.8	16.0	23.7
BAREE CREEK	5500	3/26/87	89	33.5	30.4	47.2
BAREE MIDWAY	4600	3/26/87	73	24.8	20.9	36.6
BAREE TRAIL	3800	3/26/87	19	5.8	4.7	8.7
BARKER LAKES	8250	4/02/87	38	11.1	14.7	15.9
BARKER LAKES PILLOW	8250	4/01/87	---	12.4	14.7	16.3
BASIN CREEK	7180	3/27/87	37	8.5	8.8	9.2
BASIN CREEK PILLOW	7180	4/01/87	---	7.5	6.2	8.9
BASSOO PEAK	5150	3/27/87	21	6.6	4.0	11.9
BEAGLE SPRINGS	8850	3/30/87	34	8.4	11.2	10.2
BEAGLE SPGS PILLOW	8850	4/01/87	---	7.9	9.7	9.4
BEAR BASIN	8150	4/01/87	44	13.4	16.0	21.9
BEAR PAW SKI AREA	5200	3/25/87	10	2.1	.0	7.4
BEAVER CREEK PILLOW	7850	4/01/87	---	11.2	19.0	19.9
BERRY MEADOW	7000	3/27/87	23	5.6	8.4	8.2
BIG CREEK	6750	4/01/87	93	34.4	44.6	46.6
BIG SKY	7700	4/02/87	36	11.0	13.6	16.8
BIG SKY MEADOW	6350	4/01/87	16	6.5	8.8	9.8
BIG SNOWY	7150	3/30/87	64	16.4	21.1	22.7
BLACK BEAR	7950	3/25/87	70	20.2	49.4	43.2
BLACK BEAR PILLOW	7950	4/01/87	---	23.3	43.5	39.3
BLACK MOUNTAIN	7750	3/31/87	41	10.5	12.4	17.0
BLACK PINE PILLOW	7100	4/01/87	---	9.3	10.6	15.0
BLACK PINE	7100	3/26/87	29	8.5	9.8	14.0
BLACKTAIL	5650	4/01/87	35	10.4	--	--
BLOODY DICK PILLOW	7550	4/01/87	---	8.8	13.0	13.2
BLOODY DICK	7600	3/30/87	31	8.4	14.0	14.2
BLUE LAKE	5900	3/31/87	56	20.0	17.8	25.9
BOTS SOTS	7750	3/25/87	25	6.0	7.0	8.3
BOULDER MOUNTAIN	7950	3/25/87	41	12.0	20.6	20.1
BOULDER MTN PILLOW	7950	4/01/87	---	14.0	20.3	22.1
BOX CANYON	6670	3/28/87	28	6.9	9.0	12.4
BOX CANYON PILLOW	6700	4/01/87	---	6.9	6.2	10.2
BOXELDER CREEK	5100	3/25/87	25	6.8	3.6	8.7
BRANHAM LAKES	8850	4/01/87	72	26.4	28.4	30.9
BRIDGER BOWL PILLOW	7250	3/30/87	---	15.9	18.3	27.5
BRIDGER BOWL	7250	3/30/87	48	15.7	17.8	28.0
BRISTOW CREEK	3900	4/03/87	12	5.2	5.0	9.6
BRUSH CREEK TIMBER	5000	3/31/87	25	6.2	5.6	9.9
BULL MOUNTAIN	6600	3/30/87	17	5.5	6.2	6.5
CABIN CREEK	5200	3/26/87	18	5.1	2.9	6.3
CALL ROAD	8050	3/31/87	34	10.3	11.3	12.8
CALVERT CREEK	6430	3/31/87	26	6.7	11.3	12.0
CALVERT CR PILLOW	6430	4/01/87	---	4.9	7.0	9.1
CAMP MISERY	6400	4/03/87	88	35.2	37.0	50.1
CAMP SENIA	7890	3/25/87	20	4.4	5.2	6.9
CARROT BASIN PILLOW	9000	4/01/87	---	20.0	28.8	29.2
CARROT BASIN	9000	3/27/87	74	24.2	31.0	37.7
CARTER CREEK	7400	4/03/87	20	5.6	5.1	6.0
CASHE CREEK PILLOW	7800	4/01/87	---	7.7	8.8	10.6
CEDAR GROVE	3760	4/03/87	28	9.4	11.5	12.2
CHESSMAN RESERVOIR	6200	3/26/87	7	1.2	1.2	4.0
CHICKEN CREEK	4060	3/30/87	33	10.9	8.9	14.1
CLOVER MOW PILLOW	8800	4/01/87	---	15.1	16.3	18.5
CLOVER MEADOW	8600	3/31/87	40	9.9	14.5	18.9
COLE CREEK	7850	3/30/87	71	17.6	19.0	18.4
COLE CREEK PILLOW	7850	4/01/87	---	18.1	17.2	18.3
COLLEY CREEK	6300	3/30/87	17	4.8	7.4	8.9
COMBINATION	5600	3/26/87	13	3.1	5.1	6.3
COMBINATION PILLOW	5600	4/01/87	---	2.5	3.4	6.5
COOKE STATION	8150	3/30/87	44	12.1	20.6	20.2
COPPER BOTTOM	5200	3/31/87	24	7.8	3.2	10.8
COPPER BOTTOM PILLOW	5200	4/01/87	---	8.9	9.4	13.3
COPPER CAMP PILLOW	6950	4/01/87	---	20.9	28.4	35.9
COPPER CAMP	6950	3/31/87	56	19.6	22.6	31.4
COPPER CREEK	5700	3/31/87	31	9.5	5.4	14.9
COPPER MOUNTAIN	7700	3/26/87	31	7.0	10.2	12.1
COTTONWOOD CREEK	6400	3/31/87	23	6.2	7.3	9.3
COYOTE HILL	4200	3/26/87	24	7.0	5.5	9.8
CREVICE MOUNTAIN	8400	3/31/87	26	5.9	9.5	11.1
CRYSTAL LAKE	6050	3/30/87	46	10.9	10.8	14.8
CRYSTAL LAKE PILLOW	6050	4/01/87	---	9.1	9.1	15.5
DAD CREEK LAKE	8400	3/30/87	53	14.6	17.0	15.1
DAISY PEAK	7600	3/27/87	30	6.2	9.0	11.7
DALY CREEK	5780	3/31/87	31	9.3	10.8	12.4
DALY CREEK PILLOW	5780	4/01/87	---	8.2	9.7	12.6
DARKHORSE LK. PILLOW	8700	4/01/87	---	17.3	26.6	25.1
DARKHORSE LAKE	8600	3/30/87	51	15.0	26.8	28.1
DAVIS CREEK	5400	4/01/87	53	19.5	16.8	24.3
DEADMAN CR PILLOW	6450	4/01/87	---	5.9	7.3	10.8
DEADMAN CREEK	6450	3/26/87	21	5.3	10.2	11.8
DESERT MOUNTAIN	5600	4/03/87	30	12.1	9.0	16.2
DEVILS SLIDE	8100	3/31/87	50	14.7	16.4	23.0
DISCOVERY BASIN	7050	3/26/87	32	7.4	10.8	11.8
DIVIDE	7800	3/31/87	30	8.4	10.0	12.0
DIVIDE PILLOW	7800	4/01/87	---	8.1	11.0	12.5
DIX HILL	6400	3/28/87	31	8.2	9.1	11.5
DUPUYER CREEK PILLOW	5750	4/01/87	---	9.5	7.8	13.6
EAGLE CREEK	7000	3/31/87	33	9.2	12.1	14.9
EAST BOULDER S	9250	3/29/87	68	20.5	30.0	31.6
EAST FORK R.S.	5400	3/26/87	9	2.4	3.0	5.8
EL DORADO MINE	7800	3/24/87	61	14.0	21.2	22.3
ELK HORN SPRINGS	7800	3/29/87	24	6.0	8.1	9.6
ELK PEAK	8000	3/30/87	42	11.1	16.4	17.8
EMERY CREEK	4350	4/03/87	32	12.8	9.1	15.9
EMERY CREEK PILLOW	4350	4/01/87	---	13.7	10.7	16.7
FATTY CREEK	5500	4/04/87	53	19.6	17.3	24.8
FISH CREEK	8000	3/27/87	41	10.0	9.5	10.4
FISHER CREEK PILLOW	9100	4/01/87	---	23.4	37.8	37.0
FISHER CREEK	9100	3/30/87	71	23.8	46.2	39.6
FIVE-BULL	5700	3/31/87	15	4.1	1.6	6.6
FLATTOP MTN PILLOW	6300	4/01/87	---	38.1	36.0	46.8
FLEECER RIDGE	7500	3/30/87	30	7.0	9.5	11.7
FOOLHEN	8280	3/29/87	40	10.4	14.6	17.8
FOREST LAKE	6400	3/31/87	32	8.9	10.4	13.0
FOUR MILE	6900	3/27/87	27	6.7	7.6	9.2
FOURTH OF JULY	3450	3/26/87	13	4.3	4.9	7.3
FRED BURR PASS	8000	4/03/87	50	15.7	26.2	26.2
FREIGHT CREEK	6000	3/31/87	44	13.9	12.2	15.8
FRIDAY HILL	4620	3/26/87	45	15.0	9.0	20.4
FROHNER MEADOWS	6480	3/26/87	22	5.5	5.8	8.5
FROHNER MOWS PILLOW	6480	4/01/87	---	6.5	7.4	10.5
GARVER CREEK PILLOW	4250	4/01/87	---	7.5	7.0	10.0
GARVER CREEK	4250	4/01/87	25	8.7	6.0	10.5
GIBBONS PASS	7100	3/26/87	44	13.6	21.2	24.0
GOAT MOUNTAIN	7000	3/26/87	32	8.1	6.2	10.8
GOLD CREEK LAKE	7200	3/24/87	42	9.6	13.6	16.5
GOLD STONE	8100	3/30/87	39	11.0	18.4	18.0
GRASSHOPPER	7000	3/30/87	16	4.2	4.5	6.3
GRAVE CRK PILLOW	4300	4/01/87	---	13.8	8.9	17.1
GRAVE CREEK	4300	4/03/87	31	12.6	10.0	17.6
GRIFFIN CR DIVIDE	5150	3/27/87	33	8.5	5.9	11.7
GUNSIGHT LAKE	6300	4/04/87	74	30.5	35.4	40.2
HAND CREEK	5030	3/31/87	36	9.8	11.0	14.5
HAND CREEK PILLOW	5030	4/01/87	---	9.6	11.5	14.2
HAWKINS LAKE PILLOW	6450	4/01/87	---	21.6	27.0	28.1
HAWKINS LAKE	6450	4/01/87	68	26.9	27.1	30.8
HAYMAKER	8050	3/30/87	35	6.7	--	13.2
HEART LAKE TRAIL	4800	3/29/87	43	15.6	17.8	22.0
HEBGEN DAM	6550	3/28/87	26	7.9	10.7	12.5
HELL ROARING DIVIDE	5770	4/02/87	75	26.7	21.8	32.1
HERRIC JUNCTION	4850	3/30/87	61	21.5	17.9	28.1
HOLBROOK	4530	3/25/87	21	6.9	3.8	9.4
HOOD MEADOW	6600	3/31/87	22	6.4	6.8	11.5
HOODOO BASIN PILLOW	6050	4/01/87	---	34.0	40.9	48.9
HOODOO BASIN	6050	3/29/87	102	39.2	46.8	51.8

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
HOODOO CREEK	5900	3/29/87	89	34.2	39.2	47.8
INDEPENDENCE	7850	3/28/87	45	11.9	16.7	18.7
INTERGAARD	6450	3/27/87	20	5.3	6.6	9.0
JAHNKE LAKE TRAIL	7200	3/30/87	24	6.7	10.5	10.4
JOHNSON PARK	6450	3/27/87	15	3.3	4.4	7.2
KEELER CREEK	3300	4/01/87	21	8.6	8.3	10.8
KINGS HILL	7500	3/26/87	28	7.4	15.8	14.9
KISHENEHN	3890	3/31/87	19	4.4	1.7	7.3
KIWANIS CAMP	3720	3/25/87	5	1.0	.0	.9
KRAFT CREEK PILLOW	4750	4/01/87	---	7.1	6.8	11.2
LAKE CREEK	6100	3/31/87	16	5.1	5.0	9.0
LAKEVIEW CANYON	6930	3/26/87	30	7.9	9.2	13.1
LAKEVIEW ROG. PILLOW	7400	4/01/87	---	7.1	9.6	14.7
LAKEVIEW RIDGE	7400	3/26/87	27	7.0	9.0	11.7
LEMHI PASS	7480	3/30/87	28	8.5	8.0	9.4
LEMHI RIDGE	8100	3/30/87	34	11.0	11.6	10.8
LEMHI RIDGE PILLOW	8100	4/01/87	---	8.7	11.9	11.6
LICK CREEK PILLOW	6860	4/01/87	---	8.2	6.8	10.8
LICK CREEK	6860	3/31/87	28	8.1	7.8	10.8
LITTLE PARK	7400	4/01/87	35	10.2	13.2	16.9
LOGAN CREEK	4300	3/31/87	17	5.5	5.9	7.3
LONE MOUNTAIN	8880	4/03/87	48	15.8	21.0	23.8
LOST HORSE	5940	3/30/87	61	21.9	26.6	33.4
LOST SOUL	4800	4/03/87	31	11.7	10.7	15.7
LOWER TWIN PILLOW	7900	4/01/87	---	16.1	19.6	20.1
LOWER TWIN	7900	3/27/87	63	17.2	22.1	22.4
LUBRECHT FLUME	4680	4/01/87	1	.4	.0	4.6
LUBRECHT PILLOW	4680	4/01/87	---	3.2	.7	5.1
LUBRECHT FOREST NO 3	5450	4/01/87	12	3.8	3.9	7.1
LUBRECHT FOREST NO 4	4650	4/01/87	1	.4	.0	2.3
LUBRECHT FOREST NO 6	4040	4/01/87	2	.7	.3	2.5
LUBRECHT HYDROPLOT	4200	4/01/87	7	2.4	.0	4.5
MADISON PLT PILLOW	7750	3/25/87	---	15.6	27.1	25.3
MADISON PLATEAU	7750	3/25/87	50	14.9	28.7	24.1
MANY GLACIER	4900	3/29/87	44	15.3	10.2	20.9
MANY GLACIER PILLOW	4900	4/01/87	---	12.6	5.9	18.5
MARIAS PASS	5250	3/30/87	41	14.1	9.0	18.1
MAYNARD CREEK	6210	3/30/87	29	8.7	10.0	16.1
MAYNARD CR PILLOW	6210	3/30/87	---	6.1	6.3	12.2
MIDDLE MILL CREEK	7850	4/01/87	42	13.1	12.1	17.5
MILL CREEK	7500	3/30/87	32	9.3	10.0	13.8
MINERAL CREEK	4000	3/30/87	35	12.6	9.6	18.0
MONUMENT PK PILLOW	8850	4/01/87	---	14.4	22.8	21.8
MONUMENT PEAK	8850	3/28/87	62	17.9	27.4	27.2
MOSS PEAK	6780	4/01/87	93	35.0	36.2	--
MOSS PEAK PILLOW	6780	4/01/87	---	31.3	35.4	42.8
MOULTON RESERVOIR	6850	3/26/87	19	4.5	6.2	7.0
MT LOCKHART PILLOW	6400	4/01/87	---	18.1	21.3	21.8
MOUNT LOCKHART	6400	3/29/87	60	18.4	20.4	23.4
MUDD LAKE	7650	3/31/87	39	11.4	19.8	21.1
MULE CREEK	8300	3/30/87	41	12.0	13.7	16.2
MULE CREEK PILLOW	8300	4/01/87	---	12.4	12.3	14.2
NEVADA CREEK	6480	3/31/87	35	9.8	9.4	15.2
NEVADA CREEK PILLOW	6480	4/01/87	---	9.9	10.0	14.2
NEW WORLD	6900	3/27/87	47	12.3	12.9	16.1
NEWTON MOUNTAIN	5600	3/26/87	81	28.3	23.0	36.1
NEZ PERCE CMP PILLOW	5650	4/01/87	---	9.2	12.8	15.6
NEZ PERCE CAMP	5650	3/27/87	33	9.3	14.2	15.5
NEZ PERCE CREEK	6600	3/26/87	23	5.0	6.5	7.3
NEZ PERCE PASS	6570	3/27/87	35	10.6	14.9	17.8
NOISY BASIN	6040	4/03/87	93	35.0	36.4	46.7
NOISY BASIN PILLOW	6040	4/01/87	---	30.1	33.3	41.6
N.F. ELK CR PILLOW	6250	4/01/87	---	8.3	10.1	14.1
N.F. ELK CREEK	6250	4/02/87	29	8.6	10.6	12.9
NORTH FORK JOCKO	6330	4/02/87	76	30.1	36.6	46.2
NORTH MEADOW	7500	3/27/87	34	8.4	7.8	9.3
N.E. ENTRANCE PILLOW	7350	4/01/87	---	5.8	8.0	9.5
NORTHEAST ENTRANCE	7350	4/02/87	17	5.4	5.5	9.5
NOTCH	8500	3/31/87	48	13.0	11.3	17.3
OPHIR PARK	7150	3/28/87	50	13.4	15.0	18.5
PALISADE CREEK	8250	3/31/87	60	20.6	30.1	30.5
PETERSON MDW PILLOW	7200	3/30/87	---	8.2	10.2	11.2
PETERSON MEADOWS	7200	3/30/87	29	7.6	9.8	11.1
PICKET PIN O	9450	3/29/87	72	22.5	22.0	26.3
PICKET PIN LOWER	6200	3/26/87	20	5.6	.0	2.8
PICKET PIN MIDDLE	7250	3/26/87	39	12.6	9.6	13.8
PICKET PIN UPPER	8100	3/26/87	67	20.0	20.3	21.0
PICKFOOT CREEK	6650	3/25/87	20	6.0	8.2	11.1
PICKFOOT CRK PILLOW	6650	4/01/87	---	6.6	6.3	12.0
PIKE CREEK	5930	3/25/87	60	23.2	19.0	25.1
PIKE CREEK PILLOW	5930	4/01/87	---	25.5	21.8	29.0

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
PIPESTONE PASS	7200	3/26/87	24	5.8	6.2	6.1
PLACER BASIN F	8830	3/29/87	60	18.0	17.5	22.1
PLACER BASIN PILLOW	8830	4/01/87	---	16.8	17.4	16.5
POORMAN CRK PILLOW	5100	4/03/87	---	26.6	21.7	33.1
POORMAN CREEK	5100	4/03/87	52	23.6	24.1	36.0
PORCUPINE PILLOW	6500	4/01/87	---	3.2	3.5	8.2
PORCUPINE	6500	3/31/87	10	3.0	5.2	8.4
POTOMAGETON PARK	7150	3/26/87	25	9.2	14.4	15.1
RED MOUNTAIN	6000	3/26/87	48	14.8	13.1	19.3
RED TOP	5260	3/26/87	64	22.5	19.4	29.9
ROCK CREEK	5600	3/30/87	33	7.0	7.2	10.7
ROCK CREEK MEADOW	8160	3/30/87	56	15.4	20.9	23.7
ROCKER PEAK	8000	3/27/87	42	9.8	14.8	15.9
ROCKER PEAK PILLOW	8000	4/01/87	---	10.7	18.9	15.7
ROCKY BOY	4700	3/25/87	8	1.0	.0	4.8
ROCKY BOY PILLOW	4700	3/25/87	---	2.3	1.4	5.9
SACAJAWEA	6550	3/27/87	32	8.8	8.7	15.4
SADDLE MTN PILLOW	7900	4/01/87	---	15.6	24.5	27.3
SADDLE MOUNTAIN	7940	3/26/87	51	15.9	24.5	26.2
SENTINEL CREEK	8300	3/26/87	50	13.6	20.8	24.7
SHORT CREEK	7000	4/01/87	13	3.4	--	--
SHOWER FALLS	8100	3/31/87	53	15.4	18.9	24.6
SHOWER FALLS PILLOW	8100	4/01/87	---	17.1	20.5	25.0
SILVER RUN	6630	3/30/87	18	3.8	3.4	6.1
SILVER RUN PILLOW	6630	4/01/87	---	5.3	2.0	7.3
SKALKAHO PILLOW	7260	4/01/87	---	15.7	23.1	25.8
SKALKAHO SUMMIT	7250	3/31/87	54	17.0	23.2	26.7
SKYLARK TRAIL PILLOW	6200	4/01/87	---	23.3	26.5	34.5
SLAG-A-MELT LAKE	8750	3/30/87	46	13.0	24.6	27.0
SLIDE ROCK MOUNTAIN	7100	3/25/87	41	11.2	13.0	17.3
SMUGGLER MINE	6960	4/01/87	31	8.6	7.6	10.8
S.F. SHIELDS PILLOW	8100	4/01/87	---	11.0	16.1	18.5
S.F. SHIELDS	8100	3/31/87	53	15.6	20.6	25.9
SPOTTED BEAR MTN.	7000	4/04/87	28	8.9	9.7	15.4
SPUR PARK PILLOW	8100	4/01/87	---	12.5	21.8	22.8
SPUR PARK	8100	3/26/87	37	9.8	20.7	22.2
STAHL PEAK	6030	4/03/87	89	35.8	30.1	40.4
STAHL PEAK PILLOW	6030	4/01/87	---	35.4	30.5	38.2
STAR LAKE E	9650	3/29/87	72	25.0	44.5	44.2
STEMPLE PASS	6600	3/27/87	30	6.4	8.1	10.9
STORM LAKE	7780	3/30/87	37	9.3	13.0	14.4
STRYKER BASIN	6180	3/30/87	90	33.3	25.4	35.4
STUART MILL	6500	3/27/87	19	5.0	7.4	7.1
STUART MOUNTAIN	7400	4/04/87	67	25.0	27.4	33.8
SUCKER CREEK	3960	3/25/87	10	1.0	.0	.3
TAYLOR ROAD	4080	3/25/87	9	1.0	.0	2.6
TEN MILE LOWER	6600	3/25/87	21	5.3	5.3	8.0
TEN MILE MIDDLE	6800	3/25/87	33	8.2	11.2	12.5
TEN MILE UPPER	8000	3/25/87	35	8.8	12.4	14.6
TEPEE CREEK PILLOW	8000	4/01/87	---	9.2	13.3	14.7
TEPEE CREEK	8000	3/31/87	41	12.0	15.8	16.3
TIMBERLINE CREEK	8850	3/25/87	49	10.4	16.0	15.2
TRAIL CREEK	7090	3/30/87	25	6.7	9.0	9.0
TRINKUS LAKE	6100	4/04/87	84	34.3	31.4	44.7
TRUMAN CREEK	4060	4/01/87	5	1.8	2.6	3.4
TV MOUNTAIN	6800	4/04/87	32	9.8	16.0	19.9
TWELVEMILE PILLOW	5600	4/01/87	---	12.4	11.3	19.5
TWELVEMILE CREEK	5600	3/30/87	40	14.7	13.9	22.3
TWENTY-ONE MILE	7150	3/30/87	30	8.2	15.0	18.2
TWIN CREEKS	3580	4/04/87	20	7.4	.0	10.7
TWIN LAKES PILLOW	6400	4/01/87	---	29.5	31.4	42.5
TWIN LAKES	6510	3/30/87	80	30.4	34.4	42.8
UPPER HOLLAND LAKE	6200	4/04/87	63	24.9	26.6	36.1
WALDRON PILLOW	5600	4/01/87	---	9.3	7.4	10.1
WALDRON	5600	3/29/87	27	8.0	3.6	10.5
WARM SPRINGS	7800	4/03/87	42	10.7	21.0	20.7
WARM SPRINGS PILLOW	7800	4/01/87	---	15.0	24.3	27.9
WEST YELL'ST PILLOW	6700	3/31/87	---	5.8	9.0	9.7
WEST YELLOWSTONE	6700	3/31/87	22	5.9	11.4	12.1
WHISKEY CREEK PILLOW	6800	4/01/87	---	11.5	19.2	18.1
WHISKEY CREEK	6800	3/25/87	42	13.1	23.2	21.8
WHITE MILL PILLOW	8700	4/01/87	---	16.2	27.8	26.6
WHITE MILL	8700	3/30/87	54	17.0	33.0	28.6
WHITE PINE RIDGE	8850	3/30/87	29	6.8	5.8	5.8
WILLOW CREEK	6500	3/30/87	37	8.8	7.3	9.8
WOOD CREEK	5960	3/31/87	33	10.4	7.5	11.6
WOOD CREEK PILLOW	5960	4/01/87	---	8.7	8.2	12.2
WRONG CREEK	5700	3/25/87	31	10.2	9.5	14.2
WRONG RIDGE	6800	3/25/87	44	14.2	16.4	19.8

Valley Precipitation



MARCH 1987

Source: NWS
Great Falls, MT

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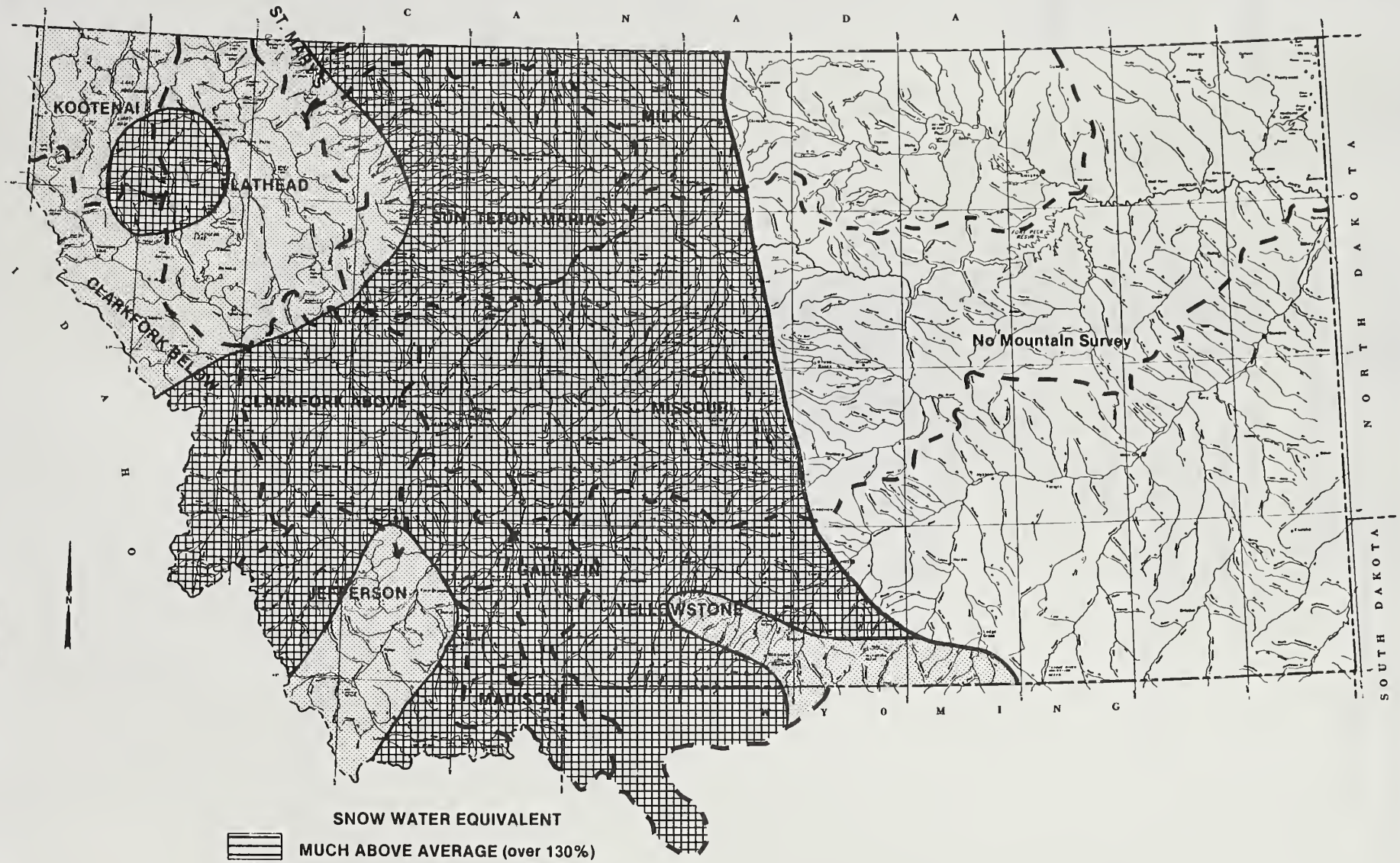
SOIL CONSERVATION SERVICE



MOUNTAIN SNOWWATER EQUIVALENT FOR MONTANA

SNOW WATER EQUIVALENT

- MUCH ABOVE AVERAGE (over 130%)
- ABOVE AVERAGE (110-130%)
- NEAR AVERAGE (90-110%)
- BELOW AVERAGE (70-90%)
- MUCH BELOW AVERAGE (below 70%)
- NO MOUNTAIN SURVEY

%1961-85 AVERAGE

APRIL 1,1987

0 25 50 75 100 MI

0 50 100 150 KM

SOURCE: Information provided by SCS Snow Survey Personnel.

JUNE 1985 4-R-39296-1

The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

Canadian

Department of the Environment
- Atmospheric Environment Service
- Water Management Service

British Columbia Ministry of Environment
- Inventory and Engineering Branch, Hydrology Section

Alberta Environment
- Technical Services Division

Federal

U.S. Department of Agriculture
- Forest Service

U.S. Department of the Army
- Corps of Engineers

U.S. Department of Commerce
- NOAA, National Weather Service
- National Environmental Satellite Service

U.S. Department of the Interior
- Bureau of Indian Affairs
- Fish and Wildlife Service
- Geological Survey
- National Park Service
- Bureau of Reclamation

U.S. Department of Energy
- Bonneville Power Administration

State

Montana Conservation Districts
Montana Department of Fish, Wildlife, and Parks
Montana Department of Natural Resources and Conservation
Montana Department of State Lands
Montana State University - Agricultural Experiment Station
University of Montana - School of Forestry

Private

Big Sky of Montana
Butte Water Company
Confererated Salish & Kootenai Tribes
Flathead Valley Comminity College
Montana Power Company
Pondera County Canal & Reservoir Company

Other organizations and individuals furnish information for the snow survey reports.
Their cooperation is gratefully acknowledged.

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SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
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